

end; subdigital lamellæ smooth, thirty-two under the fourth toe. Brown above, strongly iridescent, with small golden and blackish spots, most numerous on the sides and limbs; lower surfaces white.

	millim.
Head	15
Width of head	9·5
Body	56
Fore limb	22
Hind limb	31

A single female specimen, without tail.

3. *TYPHLOPS EXOCÆTI*, sp. n.

Body much elongate, of subequal diameter throughout. Snout depressed, rounded. Nasal semidivided, the suture in contact with the second labial; a præocular, of about the same size as the ocular, which rests on the third and fourth labials; eye very distinct, under the ocular; the so-called rostral rounded and narrowing posteriorly, the length of its upper part about equal to its width. Twenty scales round the middle of the body. Tail twice as long as broad at the base, ending in a spine. Pale brownish, each scale with a brown spot; these spots largest and darkest on the dorsal surface, where they form longitudinal lines.

Two specimens, of which the dimensions are as follows:—

- a. Total length 350 millim., diameter of body 6, length of tail 8.
- b. Total length 230 millim., diameter of body 3·5, length of tail 6.

IV. MOLLUSCA.

By E. A. SMITH.

Of the sixteen species of shells obtained at Christmas Island, fourteen belong to well-known forms, but two, a *Succinea* and a *Littorina*, appear to be new. No locality has been previously assigned to *Nerita maxima*, and *Littorina picta* has hitherto been known from the Sandwich Islands only. All or most of the marine forms occur both in the Malay Archipelago and Polynesia. The *Melampi* have an equally wide distribution; and the species of *Succinea*, although considered distinct, like most others of the genus, bears a great resemblance to those from other parts of the world.

The following is a list of the species:—

- *1. *Terebra crenulata*, Linn.
2. *Columbella (Pusiostoma) mendicaria*, Lamarck.
3. *Sistrum ricinus*, Linn. (var. *albolabris*).
4. *Mitra virgata*, Reeve.
5. *Ranella cruentata*, Sowerby.
- *6. *Triton chlorostoma*, Lamarck.

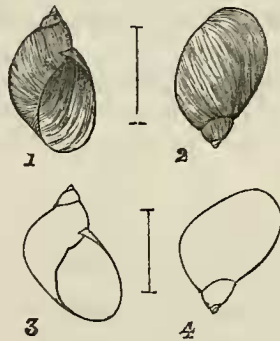
* These species are all inhabited by *Paguri*.

7. *Littorina moluccana*, Philippi.
8. *Littorina picta*, Philippi.
9. *Littorina granicostata*, sp. n.
- *10. *Nerita plicata*, Linn.
- *11. *Nerita maxima*, Chemnitz.
- *12. *Turbo lajonkairi*, Deshayes.
13. *Succinea solidula*, Pfeiffer.
14. *Succinea solitaria*, sp. n.
15. *Melampus luteus*, Quoy and Gaimard.
16. *Melampus fasciatus*, Deshayes.

SUCCINEA SOLIDULA, Pfeiffer¹.

This species has never been figured nor has a locality been previously assigned to it. The two specimens from Christmas Island agree in every respect with the types described by Pfeiffer in Mr. Cuming's collection. There are two principal features which distinguish this form, namely, the thickened peristome and the peculiar sculpture. The latter has the appearance (under a lens) of the texture

Fig. 1.



1, 2. *Succinea solidula*.
3, 4. *Succinea solitaria*.

of very fine linen, or minute crisscross lines, rather than of minute granulations as described by Pfeiffer. Besides this excessively fine ornamentation the surface exhibits rather strong lines of growth or subplications. The thickening of the peristome is slight but evident, and *internal*, hence Pfeiffer's expression "perist. submarginatum."

SUCCINEA SOLITARIA, sp. n.

Shell rather *obliquely* ovate, acuminate above, rather solid, reddish at the apex, paler on the second whorl and wax-white on the last; sculptured with very strong ridges of growth and coarse spiral striæ; volutions 3, very rapidly enlarging, two first very convex, the last sloping above and less rounded, oblique; aperture roundly

¹ Proc. Zool. Soc. 1849, p. 134; Monogr. Hel. vol. iii. p. 22.

ovate and oblique; outer lip the least thickened within; columellar margin arcuate, slightly incrassated.

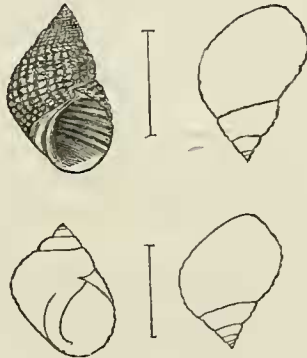
Length $9\frac{1}{2}$ millim., width $5\frac{1}{2}$; aperture 5 long, $4\frac{1}{2}$ broad.

The oblique form, the ridge-like lines of growth, and the coarse spiral striation are the distinguishing features of this shell.

LITTORINA GRANICOSTATA, sp. n.

Shell ovate, acuminate above, white with a minute blackish apex, longitudinally granosely plicate and spirally ridged and sulcated; whorls about 7, moderately convex, penultimate with about five spiral ridges ornamented with small tubercles which fall one under the other, producing longitudinal series and giving the shell a plicate appearance; last whorl with about thirteen ridges alternating with very fine thread-like striæ, and a large broad smooth thickening around the base. Aperture roundish, brown within and

Fig. 2.



Littorina granicostata.

finely lined with a darker colour, with the usual basal whitish zone; outer lip crenulated at the edge, pale and ornamented with the terminations of the internal brown lineations. Columella more or less arcuate, of a dark brown colour.

Length $11\frac{1}{2}$ millim., diam. 7; aperture 6 long, $3\frac{2}{3}$ broad. A shorter specimen is 10 in length, $6\frac{2}{3}$ in width.

This pretty species is peculiar on account of the nodules on the spiral ridges falling one under the other, thus producing longitudinal series. The single shell from Christmas Island is rather young, but it agrees in every particular with three adult specimens without locality in Cuming's collection, from which the above description is taken.